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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,379	04/13/2006	Thomas Stoneman	UG-PCT-US1	8443

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ARTHUR M DULA
LAW OFFICE OF ARTHUR M DULA
3106 BEAUCHAMP STREET
HOUSTON, TX 77009

EXAMINER
CHANNAVAJJALA, SRIRAMA T

ART UNIT	PAPER NUMBER
2166	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/595,379	STONEMAN, THOMAS
	Examiner	Art Unit	
	SRIRAMA CHANNAVAJJALA	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on <u>13 April 2006</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-19</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>13 April 2006</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 08-06)   **Office Action Summary**   Part of Paper No./Mail Date 08222008

DETAILED ACTION

NOTE: It appears that "PCT request papers" filed on 4/13/06, the title reads

"simultaneously clean and inspect sewer pipes", while specification as filed on

4/13/2006 title reads "TWO-STAGE DATA VALIDATION AND MAPPING FOR

DATABASE ACCESS" and published as US Pub.No. 2007/0067298 on March 22,

2007. Further it is noted that "data provided by applicant is not consistent with

PCT records" [see filing receipt date: 11/20/2006]

1.   Claims 1-19 pending in this application.

Drawings

2.   The Drawings filed on 4/13/2006 are <u>acceptable</u> for examination purpose

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to on-statutory subject matter.

Claims 1 and 3-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 is directed to querying any of a plurality of target databases. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful, concrete and tangible result. Specifically, the claimed subject matter does not produce a tangible result because the claimed subject matter fails to produce a result that is limited

to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. Claims 2-6 are likewise rejected.

Claim 7 is directed to querying any of a plurality of target databases. This claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful, concrete and tangible result. Specifically, the claimed subject matter does not produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. Claims 8-15 are likewise rejected. Claim 7 furthermore fails to produce a tangible result when a single reference database is not selected.

The claims 16-19 lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material per se.

The claimed invention as a whole must be useful and accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or

is simply a starting point for future investigation or research (Brenner v. Manson, 383

U.S. 519, 528-36, 148 USPQ 689, 693-96 **> (1966); In re Fisher, 421 F.3d 1365, 76

USPQ2d 1225 (Fed. Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ2d

1600, 1603-06 (Fed. Cir. 1993)).

   Adding a processor/memory would overcome the rejections.

Double Patenting

4.   A rejection based on double patenting of the "same invention" type finds its

support in the language of 35 U.S.C. 101 which states that "whoever invents or

discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis

added). Thus, the term "same invention," in this context, means an invention drawn to

identical subject matter. See Miller v. Eagle Mfg. Co., 151 U.S. 186 (1894); In re

Ockert, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and In re Vogel, 422 F.2d 438, 164

USPQ 619 (CCPA 1970).

   A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by

canceling or amending the conflicting claims so they are no longer coextensive in

scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection

based upon 35 U.S.C. 101.

5.   Claims 1-19 rejected under 35 U.S.C. 101 as claiming the same invention as that

of claims 1-4,6-16,18-19 of co-pending US application No.*10/828,575* This is a double

patenting rejection. It is further noted that claim 1 limitations in the co-pending

application is the combination of instant application claim 1 and claim 5 also claims 2

through 4,6 through 15, 18-19 are exactly same as claims 2 through 4,6 through 15, 18-

19 of instant US application No.10/595,379 , further, co-pending application claim 16

limitation is the combination of claim 16 and 17 of instant US application No.10/595,379.

6.   Claims 1-19 rejected under 35 U.S.C. 101 as claiming the same invention as that

of claims 1-4,6-16,18-19 of co-pending US application No.10/828,575

Note: co-pending US application No.10/828,575 claims as filed on 4/14/2008.

For example:

Co-pending application 10/828,575 - claim	Instant No.10/595,379- claim
Claim 1	claim 1,5
Claim 2	claim 2
Claim 3	claim 3
Claim 4	claim 4
Claim 6	claim 6
Claim 7	claim 7
Claim 8	claim 8
Claim 9	claim 9
Claim 10	claim 10
Claim 11	claim 11
Claim 12	claim 12
Claim 13	claim 13
Claim 14	claim 14
Claim 15	claim 15

Claim 16	claim 16,17
Claim 18	claim 18
Claim 19	claim 19

Examiner notes that the content of the instant application claims on record are identical to the content of claims in the co-pending US application No.10/828,575.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   *Claims 1-7 and 10-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Moon et al. ('Moon' hereinafter), USPGPUB 2003/0177118.*

9.   As to claim 1, Moon teaches a method for querying any of a plurality of target databases for one or more target database records that match an input data query (see para. 0047), said method comprising the steps of:

querying a reference database for a reference database record that matches the input data (see para. 0107, 0111, Moon) and

if a matching reference database record is found, querying any of the plurality of

target databases (para. 079, 069, Moon) for the one or more target database records

that correspond to the reference database record (paras. 079, 069, Moon).

10.   As to claim 2, Moon teaches a generating a request to enter a new input data

query if a reference database record is not found (paras. 0045, 0086, Moon).

11.   As to claim 3, Moon teaches wherein said step of querying a reference database

comprises querying the reference database for reference database records that

possibly match the input data (see para. 0107, 0111, Moon), the method further

comprising the steps of:

        if a matching reference database record is not found but one or more possibly

matching reference database records are found, determining if a possibly matching

record can be considered a near-matching record to the input data (see para. 0010,

Moon), and

        if a near-matching record is determined, querying any of the plurality of

target databases for the one or more target database records that correspond to the

near-matching record (see para. 0107, Moon).

12.   As to claim 4, Moon teaches if a matching reference database record is not found

and one or more possibly matching reference database records are found but a near-

matching record is not determined (see paras. 0010, Moon),

        generating a selection request to choose from among the one or more possibly

matching records a record that corresponds to the input data, if a possibly matching

record corresponds to the input data and is chosen, querying any of the plurality of

target databases for the one or more target database records that correspond to the

chosen record (see paras. 0107, 011 !, Moon).

13.   As to claim 5, Moon teaches wherein prior to querying the reference database,

the reference database is selected from among a plurality of reference databases based

on an input data type (see paras. 0007, 0008, Moon).

14.   As to claim 6, Moon teaches wherein the step of querying any of the plurality of

target databases further comprises, if a matching reference database record is found,

querying for records that possibly correspond to the reference database record (see

para. 0074, Moon).

15.   With respect to claim 7, Moon teaches method for querying one or more target

databases for one or more target database records (see para. 0047), said method

comprising the steps of:

        receiving an input data query, based on an input data type, selecting from among

a plurality of reference databases one or more reference databases (see para. 00785),

if a single reference database is selected:

        querying the single reference database for a reference database record that

matches the input data (see para. 0043), and

        if a matching reference database record is found, using the matching reference

database record for subsequent queries of the one or more target databases for the one

or more target database records (see para. 0008).

16.   As to claim 10,Moon teaches wherein said using step comprises the steps of removing information from the matching reference database record and subsequently using any remaining information for the subsequent queries of the one or more target databases for the one or more target database records (see para.0103).

17.   As to claim 11, Moon teaches wherein the matching reference database record comprises additional information beyond the input data query and wherein said using step comprises (see para. 0111 the steps of:

separating the information of the matching reference database record to create a plurality of forms, and using the plurality of forms for the subsequent queries of the one or more target databases for the one or more target database records (see para. 0103).

18.   As to claim 12, Moon teaches wherein if multiple reference databases are selected: sequentially querying the multiple reference databases until a reference database record that matches the input data is found (see para. 0069), and if a matching reference database record is found, using the matching reference database record for subsequent queries of one or more target databases for one or more target database records (see para. 0071).

19.   As to claim 13, Moon teaches wherein if multiple reference databases are selected: querying the multiple reference databases in parallel for all reference database records that match the input data, and if one or more matching reference

database records are found: selecting one of the matching reference database records,

and using the matching reference database record for subsequent queries of one or

more target databases for one or more target database records (see paras. 0069,

0071).

20.   As to claim 14, Moon teaches wherein said selecting step is based on whether

there is a quorum among the one or more matching reference database records (see

paras. 0005, 0071).

21.   As to claim 15, Moon teaches wherein if multiple reference databases are

selected: querying the multiple reference databases for all reference database records

that match the input data, and if one or more matching reference database records are

found, using each matching reference database record for subsequent queries of one or

more target databases for one or more target database records (see paras. 0069,

0071).

Claim Rejections - 35 USC § 103

22.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

23.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

      1.   Determining the scope and contents of the prior art.
      2.   Ascertaining the differences between the prior art and the claims at issue.
      3.   Resolving the level of ordinary skill in the pertinent art.
      4.   Considering objective evidence present in the application indicating
          obviousness or nonobviousness.

24.   ***Claims 8-9 and 16-19 are rejected under 35 U.S.C. i03(a) as being***

unpatentable over Moon et al. ('Moon' hereinafter), USPGPUB 2003/0177118 as

applied to claims 1-7, and 10-15 in view of Joseph M. Bugajski ('Bugajski'

hereinafter), USP, 5,592,667.

25.   As to claim 8, Moon teaches wherein said using step comprises the steps of

converting the matching reference database record to a single canonical form and using

the canonical form for querying the one or more target databases for the one or more

target database records (see para. 0080).

       It is however, noted that Moon does not explicitly indicate claimed canonical

form.   On the other hand, Bugajski teaches claimed canonical form (This process in the

left table.(Fig. 2), which has left child entries in canonically ordered form. These

canonically ordered values are then reduced to differences in the right-hand table, see

col. 10, lines 51-54, Bugajski.

       It would have been obvious to one ordinary skill in the data processing art at the

time of the present invention to combine the teachings of the cited references because

canonical form of Bugajski's teaching would have allowed Moon's system for substantial improvements to optimize the speed of comparing the new input to the associations already learned as suggested by Bugajski at col. 7, lines 11-12.

26.   As to claim 9, Moon teaches wherein said using step comprises the steps of converting the matching reference database record to one or more canonical forms wherein each canonical form corresponds to one of the one or more target databases and

using each canonical form for querying its corresponding target database for the one or more target database records (see para. 0091).

It is however noted that, Moon does not explicitly indicate claimed canonical form. On the other hand, Bugajski teaches claimed canonical form (This process in the left table (Fig. 2), which has left child entries in canonically ordered form. These canonically ordered values are then reduced to differences in the right-hand table, see col. 10, lines 51-54, Bugajski.

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because canonical form of Bugajski's teaching would have allowed Moon's system for substantial improvements to optimize the speed of comparing the new input to the associations already learned as suggested by Bugajski at col. 7, lines 11-12.

27.   With respect to claim 16, Moon teaches a system for querying one or more target

databases for one or more target database records (see para. 0047), said system

comprising:

        a set of reference-based mapping rules for matching input data queries to

reference database records, a set of target-based query rules for matching reference

database records to target database records (see para. 0007), and

        a validation and mapping process that given an input data query, uses the set of

reference-based mapping rules to match a record in a selected reference database to

the given input data (see para. 0006), and

        uses the target-based query rules to match the one or more target database

records in the one or more target databases to the matched reference database record

or to a canonical form of the matched reference database record (see paras. 0007,

0008).

        It is however, noted that Moon does not explicitly indicate claimed canonical

form.   On the other hand, Bugajski teaches claimed canonical form (This process in the

left table (Fig. 2), which has left child entries in canonically ordered form. These

canonically ordered values are then reduced to differences in the right-hand table, see

col. 10, lines 51-54, Bugajski.

        It would have been obvious to one ordinary skill in the data processing art at the

time of the present invention to combine the teachings of the cited references because

canonical form of Bugajski's teaching would have allowed Moon's system for substantial

improvements to optimize the speed of comparing the new input to the associations already learned as suggested by Bugajski at col. 7, lines 11-12.

28.   As to claim 17, Moon teaches a reference database list specifying relations between input data types and reference databases and wherein the validation and mapping process uses the reference database list to determine the selected reference database (see para. 0008).

29.   As to claim 18, Moon teaches a list of transformation rules for converting reference database records to canonical forms (see para. 0069).

30.   As to claim 19, Moon teaches wherein the list of transformation rules are also for converting reference database records to customized canonical forms that correspond to the target databases (see para. 0073).

Conclusion

The prior art made of record

a.   US Pub. No.   2003/0177118

b.   US Patent No.   5,592,667

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108.   The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

/Srirama Channavajjala/
Primary Examiner, Art Unit 2166